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MARK J. TAUBER
202-861-3913

February 1, 1994

HAND DELIVER

Mr. William F. Caton
Office of the Secretary
Federal Communications Commission
1919 M Street, N.W., Room 222
Washington, D.C. 20554

Re: ET Docket No. 93-266
Gen. Docket No. ~~90-314~~

Dear Mr. Caton:

Enclosed are an original and nine copies of a letter written to Mr. Andrew S. Fishel for inclusion in the record in each of the above-captioned proceedings.

Please direct any questions to the undersigned counsel.

Sincerely,

Mark J. Tauber

MJT/jas
Enclosures

No. of Copies rec'd 2 Original + 9
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February 1, 1994

HAND DELIVER

Andrew S. Fishel
Managing Director
Federal Communications Commission
1919 M Street, Room 852
Washington, D.C. 20554

Re: GEN Docket No. 90-314
ET Docket No. 93-266

Dear Mr. Fishel:

This firm represents Omnipoint Communications, Inc. ("Omnipoint"). We write to respond to the January 26, 1994 letter to you from Pacific Bell, alleging that, several months ago, Omnipoint engaged in improper ex parte communications in the above-referenced dockets.[1] We note that Pacific Bell has not requested that the Commission take any action on the allegations raised. Indeed, in light of the erroneous nature of those allegations, the Commission should take no action, other than to dismiss them. As we demonstrate in further detail below, the two bases for Pacific Bell's allegations with regard to Omnipoint are factually inaccurate.

Pacific Bell's assault on Omnipoint begins with an inexcusable factual error; that Omnipoint's September 29, 1993 letter to the Commission in GEN Docket No. 90-314 "contains no indication" that service was made to parties, as required by Section 1.1202(b)(1) of the Commission's rules. However, the Commission's docket files clearly reflect that a certificate of service in compliance with both Section 1.1202(b)(1) and Section 1.47 of the Commission's rules was appended to the letter. *See*, Attachment A hereto.

[1]The Pacific Bell letter also alleges that Cox Enterprises and American Personal Communications violated the Commission's ex parte rules. We respond herein only to the allegations made against Omnipoint.

Omnipoint finds Pacific Bell's false allegation in this regard deeply concerning, considering that this issue has been the subject of extensive press coverage. *See,* Attachment B hereto. Omnipoint's letter and service list has been in the Commission's docket files, open for public inspection, for more than four months. Pacific Bell (or its counsel) could easily have located it; we did. It is hard to believe that Pacific Bell failed to conduct any fact investigation. Pacific Bell claims that it brought this matter to the attention of the Commission because of its obligation under Section 1.1214 of the Commission's rules. Section 1.1214 obligates a party to report any suspected "violation" of the rule "promptly" when that party "has substantial reason to believe" that a violation has occurred. How could Pacific Bell have formed a "substantial reason to believe" that the Omnipoint letter was improper when even a cursory fact investigation would have revealed that Omnipoint had done everything properly? How can Pacific Bell's letter be considered to be prompt when Pacific Bell waited for four months to bring its allegations to the Commission's attention?[2]

Pacific Bell goes on to suggest that Omnipoint's ex parte notices in ET Docket No. 93-266 between November 1 and December 3, 1993 violated the Commission's rules because they failed to "explain" Omnipoint's "position with respect to the Commission's proposals." We find Pacific Bell's accusation in this regard curious in light of its own statements. Pacific Bell admits that there is a "close nexus" between ET Docket No. 93-266 and GEN Docket No. 90-314. In fact, ET Docket No. 93-266 was a direct outgrowth of GEN Docket No. 90-314. Pacific Bell also characterizes Section 1.1206(a)(2) of the Commission's rules, which it accuses Omnipoint of violating, as requiring an explanation of a party's position only "to the extent" the position is "not reflected in the party's previous written filings." Omnipoint filed hundreds of pages of comments and reply comments in GEN Docket No. 90-314 and ET Docket No. 93-266. Omnipoint's positions on "the Commission's proposals" with respect to PCS and the Pioneer's Preference are all a matter of public record. Had Pacific Bell bothered to look in the Commission's docket files, it would have known that. Under such circumstances, no further explanation in an otherwise properly filed ex parte notice is necessary.

Pacific Bell has distorted the factual record in these proceedings just days after it received a waiver from the Commission, for which it lobbied, in order to eliminate its ineligibility to bid on the primary PCS spectrum blocks. Pacific Bell's distortion, and its subsequent republication in the general press, has created the impression that the same Commission that granted Pacific Bell's waiver made decisions on Pioneer's Preferences based on lobbying and not on the substance of the issues.

---

[2]To the extent that Pacific Bell is arguing that Omnipoint's September 29 letter was an improper ex parte presentation, we simply would note that the letter was not an ex parte presentation at all, as it was served on the parties to the proceeding. *See,* 47 C.F.R. 1.1202(b)(1).

Pacific Bell selectively failed to note that 84% of the comments and even a higher percentage of the reply comments in ET Docket No. 93-266 supported maintaining the current Pioneer's Preference rules, especially for the tentative awardees. These commenters represented a broad cross-section of the industry and the investment community. Only a handful of commenters, all giant telecommunications companies, argued against the overwhelming majority.

The Commission's December 23, 1993 decision in GEN Docket No. 90-314 ended a process that had gone on for nearly two years and involved six rounds of filings in the form of comments and reply comments encompassing thousands of pages. Further, both the House and the Senate discussed the Pioneer's Preference program for months before passing language authorizing the Commission to continue the program in the context of holding spectrum auctions. It is simply too late in the day and, more to the point, too disingenuous, for Pacific Bell to now argue that the final selection of PCS Pioneers by the Commission was based upon something other than merit and a thorough review of the substantive issues.

Because Pacific Bell's allegations lack any factual credibility, have not been raised in a timely fashion relative to the filings and meetings in question, and have appeared in the general press, Omnipoint strongly believes that they constitute an abuse of process and require a firm dismissal by the Commission. Should the Commission require further information, please do not hesitate to contact the undersigned directly.

Sincerely,

Mark J. Tauber
Ronald L. Plesser
Mark J. O'Conner

MJT/mjo

ATTACHMENT A

Omnipoint
CORPORATION

STAMP IN

By Messenger

September 29, 1993

Mr. William F. Caton
Federal Communications Commission
1919 M Street, N.W.
Washington, DC 20554

Re: Personal Communication Service/Pioneer Issues
General Docket 90-314

Dear Mr. Caton:

Auctions are only a few months away from implementing a guaranteed "monetary preference" to only the largest and wealthiest companies. Within days, if not hours, the Commission will decide whether the Pioneers Preference policy will fulfill its original promise and mandated Congressional authorization to encourage future entrepreneurs and those willing to risk their capital on innovation or whether the policy will be stood on its head by denying the innovators the right to offer the services and use the technologies which they proposed.

The FCC will imminently decide not only which companies will be finalized for the PCS rule making, but where and what block of the new PCS spectrum each will receive as an allocation. It has been widely rumored that the FCC is contemplating allocating the Pioneers a portion of spectrum that was not even under discussion just a few weeks ago and completely marginalized for new entrants relative to the main PCS allocation. If this is done, Omnipoint would be de facto prevented from utilizing the very technologies and services which they invented, while those who did nothing but have deep pockets will benefit from Omnipoint's pioneering efforts. To do so would destroy the purpose of the pioneers preference and once again tell the venture capital industry that they should not invest in spectrum based businesses. Further, such a decision at the time of the first use of auctions will undermine the authorization Congress gave for awarding pioneers preferences and send a devastating signal to all future entrepreneurs.

OVERVIEW AND SUMMARY

Following years of research, 150 experimental licenses at 1850-1990Mhz and an NPRM in July 1992 recommending three 30MHz licenses at 1850-1990MHz, the September 23, 1993 FCC Report and Order on PCS unexpectedly created an additional four 10MHz licenses in a different portion of the radio spectrum-- i.e. 2130-2200MHz-- and reduced one of the 30MHz licenses to 20MHz. Ostensibly, the 2100MHz band was primarily opened up so that some additional spectrum would be available for in-region cellular operators to obtain an additional 10MHz over and above their current 25MHz of clear spectrum. While this may be useful to the cellular operators which already have spectrum, it would be devastating to a new entrant such as

7150 Campus Drive Colorado Springs, CO 80920 Telephone (719) 548-1200 Fax (719) 548-1393

Omnipoint to be relegated to a portion of the band which is virtually unusable with Omnipoint's pioneering technology.

There are three major reasons for not relegating Omnipoint to 2100MHz or a 10Mhz allocation:

First, there is nothing about the 2100MHz band or a 10MHz allocation at any frequency which lends itself to the use of Omnipoint's innovations, all of which were specifically designed for use at 1850-1990MHz and optimized for use with a total of 30MHz or more per operator. These technical specifics will be detailed below.

Second, the pioneer preference is not a "reward" but rather an "award", i.e. an award of the right to offer the service which the pioneer proposed. The point of the preference is not to try to gauge the relative contribution of an innovator and scale a "reward" to match that contribution. The point is to allow the innovators to see if they can make their ideas into a successful service.

Omnipoint proposed offering a highly unique service made possible by a series of technological innovations which no other technology or service provides today. The pioneers preference rules call for the pioneer to specify frequencies for its proposed service and Omnipoint specified 30MHz at 1850-1990MHz on June 25, 1992. The July 16, 1992 NPRM on PCS recommended 30MHz licenses. The October 8, 1992 NPRM tentatively awarded Omnipoint a pioneers preference for one of these 30MHz proposed licenses. The September 23, 1993 Report and Order finalized 30MHz licenses at 1850-1990MHz.

There is nothing in the record that would justify relegating Omnipoint to a different allocation such as 10MHz or the 2100MHz band.

Third, the original reason for creating the pioneers preference was to encourage entrepreneurs to take risks and to give venture capital a reason to invest in spectrum based enterprises. Moreover, the Congress discussed the pioneers preference policy for months and concluded that the pioneers preferences policy was particularly important to foster innovation in a world of spectrum auctions.

If the FCC now allocates a portion of spectrum to Omnipoint for its pioneering efforts which Omnipoint spent none of its resources on, or within which it can not even offer its proposed service nor benefit from its innovations, while all those with the "megabucks" (as Henry Geller put it) can obtain these benefits, the pioneers preference will have been stood on its head.

ANALYSIS OF THE PIONEERS PREFERENCE PROCESS WITH RESPECT TO PCS

I. Technical Realities

As noted, there is nothing about the 2100MHz band or a 10MHz allocation at any frequency which lends itself to the use of Omnipoint's innovations, all of which were specifically designed for use at 1850-1990MHz and optimized for use with 30MHz or more per operator.

For example, one of the three specific reasons the FCC awarded the tentative pioneers preference to Omnipoint was for its technology's ability to coexist with the 10MHz and 5Mhz microwave links found at 1850-1990MHz. But the 800KHz and 1.6MHz microwave links found at 2100MHz do not allow the benefits of Omnipoint's proven sharing innovations. Omnipoint's system uses RF channels which are 10MHz to 5MHz each.

Omnipoint's system is also designed to be used in a three frequency reuse pattern to obtain the economic benefits of its innovations. This means that the optimal Omnipoint configuration needs a total of 30MHz (and a minimum of 15MHz plus guardbands).

Omnipoint was one of the few if not the only pioneers preference applicants to argue that PCS needed 30MHz per license at the time it filed for its preference. (See June 25, 1992 Replies, page 16). Omnipoint's arguments were for an allocation of 30MHz of clear spectrum and were based on the specific services which Omnipoint seeks to offer, namely wireline quality voice, data, and digitized compressed video and images. Omnipoint's system is unique in offering the end user the ability to use either highly compressed voice or ADPCM, packet data to high speed interactive data and even broadcast data. Omnipoint lobbied for an allocation that would allow PCS operators more than 30MHz due to the problem of sharing with the OFS users, but we offered several ideas on how that might be achieved with "flexible spectrum" reserves which would eventually be scaled back.

The FCC recommended 30MHz PCS licenses in their July 1992 NPRM and then they awarded Omnipoint a tentative pioneers preference for one of these 30MHz licenses. The FCC has now finalized two 30MHz licenses, thereby recognizing that more than 20 MHz is needed and in line with Omnipoint's original recommendation. But the proposed PCS allocations in the 2100MHz band are for a total of only 10MHz. As shown above, awarding Omnipoint 10MHz or an allocation in the 2100Mhz band is completely unjustified by the record, and would defeat the purpose which Omnipoint's innovations were designed to achieve.

While Omnipoint's systems can operate between 1850-1990MHz as well as between 2.4 and 2.483GHz, the system is not designed to operate any where in between those two spectrum blocks. Shifting between the 1850-1990MHz band and the 2.4GHz band is done by manually pressing a button and the two bands are for two different types of applications -- licensed and

unlicensed, public and private. Further, it is not the ideal outcome to have to use a second band, rather a second band at 2.4GHz for unlicensed applications is a fallback position in the event the new 1.9GHz unlicensed bands prove to be delayed or too expensive to clear.

Nor is it just a question of making a few minor tweaks and changes to have the system work at 2.1GHz. All of the key RF components in Omnipoint's equipment would have to be different just to operate at all at 2.1GHz--the power amps, the filters, the IF stage, the frequency synthesizer, the VCO, etc. The system would not be able to work at three blocks of frequencies, but only two, and thus one of the original two frequency blocks would have to be abandoned. Further, one of the most difficult problems would be to design an antennae which could work at both 1850-1990MHz as well as 2.1GHz. Omnipoint spent two years to develop an antennae which operates well at both 1850-1990MHz as well as 2.4GHz, and this takes advantage of the specific relationship between those two frequency bands.

Further, if the Omnipoint system was rechannelized into 800KHz and 1.6MHz spread spectrum channels most of the primary benefits of the overall architectural design would be lost. The system would no longer be able to offer variable data rates from 4Kbps to 512Kbps which is one of the most unique features of the Omnipoint service concept. Additionally, the resistance to frequency selective multipath fading, which we documented so much in our experimental reports was due to using bandwidths wider than 3MHz, would be lost. Perhaps most importantly to the consumer, the cost per user channel would automatically increase simply because so many fewer user channels per RF channel and correlation chain could be supported. The reduction in infrastructure costs of the Omnipoint architecture was one of the most important goals of the Omnipoint service concept.

Finally, even if a dual band phone capable of operating between 1850-1990MHz and 2.1GHz were built, it could not be used to handoff from cell to cell across these disparate frequency bands fast enough to deliver contiguous mobile service. This is especially true using the unique Omnipoint mobile-centric architecture and signaling protocol which is what allows Omnipoint handsets to handoff at 65 miles per hour even through very small microcells. This innovation was designed to overcome one of the major problems preventing traditional cellular architectures from using true microcells.

Thus, it is clear that it would not be possible for Omnipoint to "aggregate spectrum" from 1850-1990MHz with spectrum at 2100MHz for the purposes of providing a contiguous service.

II. The Purpose of the Pioneers Preference

The original reason for creating the pioneers preference was to encourage entrepreneurs to take risks and to give venture capital a reason to invest in spectrum based enterprises. The petition which eventually led to the Pioneers Preference rule making summarized the reason for the petition as follows:

"At present, the allocation process, which requires public notice of the proposed innovation and then simply places a successful petitioner on equal footing with all other rivals in the ensuing authorization process (often of a lengthy nature), inhibits rather than enhances the likelihood of venture capital flowing to technological development in the communications sphere."

Petition for Issuance of Notice of Inquiry and
Notice of Proposed Rule making
Henry Geller and Donna Lampert
July 14, 1989

Limiting the pioneers preference allocation would not put an innovator on an even equal footing with its competitors. Rather, the pioneer would be disadvantaged. Note that three years earlier, these same petitioners stated the problem more graphically:

"When an applicant, especially small companies but also divisions of larger organizations, develops a new idea for service in the communications field requiring a change in the FCC's rules, it cannot simply go to financial sources such as venture capitalists for funds and if successful, try its concept by "springing" it upon the market. It must first induce the Commission to allocate spectrum space or to change some substantive spectrum assignment rules or technical standards. When it does so, its idea is made public, and all secrecy is "blown". During the rule making proceeding to allocate the spectrum or change the rules or standards, others -- perhaps much larger communications entities with "megabucks"--can evaluate the concept, and if the rule making request is approved, enter the market at the same time as the original petitioner. Thus the governmental process undermines the competitive edge that would normally accrue to the technical innovator. In such circumstances, venture capital may not be available to the innovator, the idea dies with no market trial, and the public loses.

It is this loss to the public --this gap in entrepreneurial support--that the Commission should confront and somehow solve. Some have characterized the wireline set-aside in cellular as a tacit recognition by the Commission that AT&T was rewarded for the over $100 million spent in developing cellular technology, and pushing the FCC to adopt the technology."

Henry Geller, et al
December 11, 1986

Omnipoint represents the paradigm case of how the pioneers preference was supposed to work. A group of entrepreneurs struggled for years without pay, innovated a new technology, petitioned the FCC for an experimental license and a pioneers preference to offer a totally unique service, proved its technological claims, was tentatively awarded a pioneers preference to offer its innovative service, raised venture capital, and saw its rule making recommendations finalized by the FCC. Omnipoint has now raised a total of over $30 million, which for a start up is far more significant proportionately than the investment by ATT for which they were awarded a

national license for free. (Note that ATT gave the cellular licenses to the spun off RBOCs as part of the consent decree).

No other company, in any docket, was the subject of so many experimental reports. No other company besides Omnipoint, in any docket, which was awarded a tentative pioneers preference allowed its technology or innovations to be tested by the competing pioneers applicants for critique during the comment period. (For example, Mtel did not turn its system over to Bell South for analysis.) No commenter in the PCS docket suggested that the pioneers preference policy should be abandoned or the award marginalized. No party which tested Omnipoint's 1850-1990MHz system suggested Omnipoint's award should be denied. More importantly, all tests confirmed Omnipoint's innovations and many companies explicitly acknowledged the uniqueness of these innovations. (See Appendix A)

It should never be forgotten that the pioneer preference is not a "reward" but rather an "award", i.e. an award of the right to offer the service which the pioneer proposed. The point of the preference is not to try to gauge the relative contribution of an innovator and scale a "reward" to match that contribution. The point is to allow the innovators of a service to see if they can make it a successful service. One should recall that in the UK all four CT2 license operators lost more than $50 million each before shutting down, and that two of the three PCN operators have let their licenses go fallow. A finalized pioneers preference is hardly a guarantee of success, it is only a chance to try one's ideas.

Omnipoint proposed offering a unique service: a) a single Common Air Interface which allows the user to select compressed voice or wireline quality voice, packet data to ISDN data rates, digitized compressed video, or even high speed data broadcast; b) a single handset which can be used in either licensed or unlicensed bands, for public services or private applications such as PBXs or residences; and c) a service which offers full coverage, two way calling, and full mobility at substantially reduced infrastructure costs. It is interesting to note that the three major standards bodies -- TIA, T1P1, and Telocator's T&E Subcommittee -- have all now adopted Omnipoint's proposed definition of PCS as offering "wireline quality voice and data".

The pioneers preference rules call for the pioneer to specify frequencies for its proposed service and Omnipoint specified 30MHz at 1850-1990MHz on June 25, 1992. The July 16, 1992 NPRM recommended 30MHz licenses. The October 8, 1992 NPRM tentatively awarded Omnipoint a pioneers preference for one of these 30MHz proposed licenses. The September 23, 1993 Report and Order finalized 30MHz licenses. Omnipoint's preference should therefore be finalized for a 30MHz allocation.

One should recall that in the April 9, 1991 Report and Order on pioneers preferences the Commission specifically stated that the reason for making the initial determination of pioneers at the time of the NPRM was:

"If we defer this decision to the report and order stage of the proceeding, it will prolong the regulatory uncertainty for the innovator and thereby have a chilling effect on investor's willingness to provide financial support. Our general policy of awarding a preference even if the report and order modifies the proposed service to some extent, as discussed above, will tend to lessen the likelihood that an initial determination to grant a preference would mislead the pioneer and the financial community."

Report and Order
GEN Docket No. 90-217
April 9, 1991 & May 13, 1991

If the FCC now allocates a portion of spectrum to Omnipoint for its pioneering efforts which Omnipoint spent none of its resources on, or within which it can not even offer its proposed service nor benefit from its innovations, while all those with the "megabucks" can obtain these benefits, the pioneers preference will have been stood on its head. Even Omnipoint's competitors in the preference service area would be able to benefit from Omnipoint's innovations while Omnipoint would not. The venture community will never forget such a betrayal of purpose.

III. Congressional Mandate and The Public Good

During the months which the House and Senate debated the auction bill one of the primary concerns was how to prevent only the largest and richest companies from ending up with all of the radio spectrum. Congressman Markey held a hearing in April to discuss auctions at which every speaker except the head of the CTIA emphasized the importance of preserving the pioneers preference policy. Those speaking out in favor of the pioneers preference policy included not just winners but also two losing applicants, industry trade groups, as well as companies which were still looking forward to the chance to apply for a preference in future proceedings.

One of the themes driven home by that hearing was that the pioneers preference mechanism was more important than ever in a world of spectrum auctions. It was graphically pointed out that there are three reasons why the pioneers preference policy goes hand in hand with a policy to sell the spectrum to the highest bidders.

First, the public policy goal of encouraging innovation de facto requires it. There is no incentive to innovate if the only reward is the right to bid against the largest companies in the world to use your own inventions.

Second, the public policy goal of achieving diversity in the ownership of licenses and the provision of services means that other mechanisms besides auctions must be used to allocate

licenses. Lotteries are referred to as "private auctions" and the cellular industry ended up with nine companies controlling 90% of the population. Where were all the other bidders in these "private auctions" and what makes anyone believe there will be new winners just because there are public auctions? Ideas regarding creative bidding mechanisms to help small businesses are fraught with implementation problems, may never happen, and have nothing to do with rewarding the innovators of new technologies or services. The pioneers preference policy is the only policy which entrepreneurial firms can look to with any confidence as a mechanism for obtaining a license.

Third, although Congress specifically prohibited the FCC from considering the revenue raising implications of its allocation decisions, it is a fortuitous harmony that the public benefit of raising revenue through auctions is substantially furthered through the creation of pioneers preferences. Whatever PCS licenses are worth, they are worth far more today than four years ago before the incentive of the pioneers preference encouraged more than 100 companies to experiment to try to solve the problems then facing the nascent PCS industry. The government is now planning to sell thousands of PCS licenses to raise billions of dollars. Congress recognized that awarding a tiny percentage of meaningful licenses to successful pioneers is what will encourage future entrepreneurs to come up with the proposals which will result in future revenue to the government through future auctions. The pioneers preference incentive is the golden goose of spectrum auction revenues.

With the passage of the auction bill authorizing the Commission to allocate pioneers preferences the Congress has voiced it decision that the government is willing to invest in innovation. Fifteen years ago Congress authorized the most conservative of all trusts -- the pension funds-- to invest 5% of their funds in risky investments. This single act launched the venture capital industry into a multibillion dollar source of investment which in turn launched billions of dollars of investment in such industries as computers, software, and biotechnology. But as Henry Geller noted, venture capital was loathe to invest in RF spectrum based businesses because the regulatory processes could destroy the value to the entrepreneurs who did the pioneering. The pioneers preference policy as reaffirmed and authorized by Congress now has the opportunity to launch investments in innovation in RF spectrum based industries.

This Commission faces an historic decision for which they will long be remember: whether to accept Congress's mandate to encourage innovation through the use of pioneers preferences or to send a devastating blow to all entrepreneurs and to effectively only award "monetary preferences" via the auctions to those with the deepest pockets who can wait and buy licenses after all the innovations and services are known. We trust the Commissioners will side with the idealists.

Respectfully submitted,

Douglas G. Smith

Douglas G. Smith,
President

cc: The Honorable James H. Quello
The Honorable Ervin S. Duggan
The Honorable Andrew C. Barrett

Byron F. Marchant, Esq.
Linda L. Oliver, Esq.
Randall S. Coleman, Esq.
Mr. Jeffrey Hoagg
Renee Licht, Esq.
Ms. Kathleen Levitz
Mr. Gerald P. Vaughn
Mr. John Cimko, Jr.
Mr. Steve Markendorff
Mr. Myron C. Peck
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Mr. Thomas P. Derenge
Mr. Paul Marrangoni
David R. Siddall,Esq.
Dr. Robert M. Pepper
Mr. John R. Williams
Dr. Evan R. Kwerel
Mr. David P. Reed
Mr. Ralph A. Haller
Ms. Beverly G. Baker
Mr. Martin D. Liebman
Mr. John Winston
Dr. Thomas P. Stanley
Mr. Bruce A. Franca
Mr. Fred Thomas

Appendix A

"Ameritech concurs with the Commission' decision that Omnipoint should be awarded a preference based on its development of 2 GHz equipment that "utilizes advanced techniques that will facilitate the continued development and implementation of PCS services and technologies." This equipment and the advanced spread spectrum technology upon which it is based are truly innovative and hold incredible promise for the future of PCS."

Ameritech's Reply Comments
March 1, 1993

"The Omnipoint system is not just another CDMA system. The Omnipoint system use the coding gains of spread spectrum in a way never before suggested or implemented to our knowledge, combining CDMA, TDMA, and FDMA into one system. Several of its benefits in the shared spectrum environment are due to this combined approach.

"The Omnipoint system and technical approach is a conspicuous case of innovative technology."

LCC Incorporated
March 1, 1993

"The Commission's tenative grant of preference to ... Omnipoint is clearly warranted."

Tel/Logic Inc.
January 29, 1993

"It became clear that two [Omnipoint] base stations were required to detect any discernible effect at the microwave receiver [1 mile away]...a noise slot degradation of less than 0.2 dB was seen while transmitting with two base stations operating at full power...the maximum estimated interference power injected into the microwave receiver was ... 14dB higher than initially planned [with no interference even by the conservative TSB10E standard]."

Southwestern Bell
December 12, 1992

"Omnipoint has strongly proven its pioneering claims to its equipment now being tested by numerous experimental license holders."

Comsearch
January 29, 1993

"High quality voice service was observed at almost every test location throughout the [Queens 500 channel cable head end] office."

Time Warner
September 14, 1993

"The current development and test format of TDD and CDMA was chosen for Cox's 1.9GHz RAD/RASP integration because available prototype equipment from Omnipoint came closer to fulfilling Cox's full functionality service vision of PCS than did other 1850-1990mHz equipment."

Cox Enterprises, Inc
April 1993

"A single [Omnipoint] base station and the 4 [Omnipoint] CATs [cable antennae transcievers] effectively provided reliable coverage to 153 homes. The CAT shows promise as a way to cost effectively extend coverage in an implementation of cable TV-based PCS. ... A 40 mile per hour vehicular handoff was successfully completed.

Cox Enterprises, Inc
August 20, 1993

"The Omnipont system uses CDMA in a highly novel and innovative technique to multiplex signals for the purpose of increasing the system data rate while at the same time achieving a low average transmitted power and a low system error rate.... and provides a highly unique and innovative contribution to CDMA spread spectrum communication technology."

Dr. Robert Gold
August 10, 1993

"In fact, Omnipoint has developed performance capabilities and demonstrable hardware that many of their competitors can only talk or dream about at this point."

Dr. George D. O'Clock
August 11, 1993

CERTIFICATE OF SERVICE

I, Mark J. Tauber, hereby certify that copies of the forgoing letter were served via first-class, postage-prepaid mail, or by hand delivery where indicated by an asterisk (*), on this 29th day of September, 1993 to the parties listed below:

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Federal Communications
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Commissioner Andrew C. Barrett*
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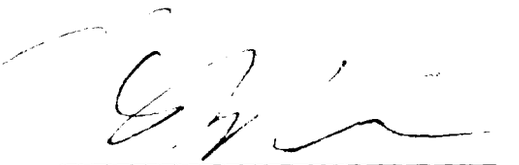

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ATTACHMENT B

Business Day

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MONDAY, JANUARY 31, 199

The New York Times

Suzanne DeChillo/The New York Times

"We did everything by the book," Douglas Smith, right, the president of Omnipoint, said in response to criticism of the tiny Colorado corporation's winning of a license to sell enhanced wireless voice, video and data services to the 27 million people in metropolitan New York. He showed a cellular phone to Thomas A. Stroup, president of the Personal Communications Industry Association, at a seminar last week.

F.C.C. 'Pioneer' Policy Under Attack

By PETER PASSELL

Until last month, the Omnipoint Corporation was just one of hundreds of promising high-tech start-ups getting by on a few research dollars and a dream. But on Dec. 23 the Federal Communications Commission handed the tiny Colorado corporation a license to sell enhanced wireless voice, video and data services to the 27 million people in metropolitan New York.

Although the license is conservatively valued at $250 million, the commission considered Omnipoint a technological pioneer in the field, and granted it the license free.

What did Omnipoint and the two winners of similarly valuable licenses to offer personal communications services in Southern California and Washington-Baltimore do to deserve this golden pat on the back? The answer, depending on whom you ask, ranges from the development of exceptional technology to indefatigable lobbying.

The Ameritech Corporation, an ally of Omnipoint's, wrote that the company's work shows "incredible promise." On the other hand, Pacific Telesis, which spun off its conventional cellular phone service to focus on personal communications services, is challenging the awards on the ground that the winners may have violated anti-lobbying rules. Where the equities lie apparently has to be settled by the courts.

What is clear, though, is that the industrial policy of rewarding telecommunications innovators with multimillion-dollar slices of the radio spectrum is under bitter attack from those who think the process is an administrative quagmire and a magnet to political meddling. While much of the opposition is coming from competitors with big money at stake, the battle over personal communications services has also sown doubts among independent analysts. Henry Geller, a former general counsel to the commission who crusaded for pioneer preferences, now says that he "made a mistake."

The economic case for pioneer preferences is simple, at least in theory. Payoffs from innovation can often be protected by patents or copyrights. Where they cannot, simply being first with the best is often sufficient reward: Federal Express, for example, built a business empire on the idea of routing packages overnight through a single air hub. But in cases where commercial exploitation depends on access to the radio spectrum, argued Mr. Geller and others, innovators are often out of luck.

Under a system that has changed little in the last half century, anyone who spent the time and money to persuade the F.C.C. to set aside a

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G.M. Profit May Top Goal for '93

Chief Says Company Has Turned Corner

By JAMES BENNET

Special to The New York Times

SAN FRANCISCO, Jan. 30 — Saying that the North American operations of General Motors had "absolutely" turned the corner, G.M.'s president and chief executive, John F. Smith Jr., hinted in an interview Saturday that the company's 1993 earnings would beat its own goal.

"The trend in improvement is rather interesting," Mr. Smith said. In the past, he pledged that the North American operations, which lost $17 billion from 1990 through 1992, would break even before interest, taxes and other special charges. But in the interview he said "we will be black" before such charges.

Mr. Smith attributed the improvement to cost-cutting, the company's revamping and the strong yen, which has driven up the cost of some Japanese automobiles in the United States.

'An Order of Magnitude'

In the same interview, J. Michael Losh, vice president and group executive in charge of vehicle sales, service and marketing for G.M.'s North American operations, said earnings would track the $4 billion turnaround G.M. achieved between 1991 and 1992, producing "an $8 billion to $10 billion improvement in two years' time." But Mr. Losh later called that figure "an order-of-magnitude-type number, rather than anything very specific."

But, Mr. Losh said, "Clearly our financial results in North America are much better." G.M. is expected to release its 1993 earnings in the next few weeks. The Chrysler Corporation reported record earnings for 1993 two weeks ago.

Automobile analysts have speculated that G.M., the world's biggest auto maker, was likely to present a pleasant surprise when it released its earnings, based in part on Mr. Smith's having shifted his watch to his left

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